Pricope Tidor-Vlad

ptidor1@gmail.com | +447909820976 | TidorP | ptidor.com | blog

Education

- **The University of Edinburgh**, Scotland, UK. | 2020 - 2021

MSc in Artificial Intelligence. Coursework avg. **83.23/100**. GPA: *First class* (4.0).

- **Babes-Bolyai University**, Cluj-Napoca, Romania. | 2017 - 2020

Bachelor's degree in Computer Science. **GPA: 9.87/10. Thesis: 10/10.**

Work Experience

- **Machine Learning Engineer Lead - Ntropy |** August 2021 – April 2024
  - Fintech company series A, developed and deployed language models for financial transactions understanding.
  - Some of my work here is public and can be viewed on this medium post (co-author).
  - Hiring operations – interviewed over 100 candidates for machine learning and data science roles at Ntropy.
  - Fine-tuning and optimizing LLM usage through smart caching was also a big part of my work.
  - Tools used: *transformers in pytorch, onnx&triton, fasttext, sklearn, multi-gpu training, git, jupyterlab, aws, LLM*.
- **Quantitative Research Assistant - Predictiva |** April 2021 – August 2021
  - Developed Deep Reinforcement Learning models for portfolio management for algorithmic trading.
  - Tools used: *python, RLlib, tensorflow keras, cloud computing.*
- **Quantitative Research Intern - Predictiva |** February 2021 – April 2021
  - Developed Deep Reinforcement Learning models for quantitative stock trading.
  - Tools used: *python, cloud computing.*
- **Udemy Instructor |** June 2020 – August 2020
  - I devised and published 2 AI courses. I had about 40 students on Udemy and 15 on Skillshare, with a rating of 4/5.
- **Autonomous Driving Research Intern - GmbH Robert Bosch |** July 2019 – Oct 2019
  - Developed optimization and simulation frameworks for camera windscreen distortions. Computer Vision.
  - Tools used: *matlab, projective geometry, multivariable calculus, optimization through adaptive algorithms and ML*.

Awards

- Second place at the **IBM** MLP Competition out of 101 projects. Project subject: AI Quantitative stock trading, 2021.
- Two Silver Medals at **South Eastern European Mathematical Olympiad** for University Students 2018-2019.
- Two Silver Medals in **top 10** and a bronze medal in **top 20** at **National Mathematical Olympiad** 2014-2016.
- Member of the **extended National Senior Team** for the **International Mathematical Olympiad** 2014.
- Diploma from **Babes-Bolyai University** for academic performance 2018.
- Top **20** at **National Chess Olympiad**, 2017.
- Other 70+ prizes in math and chess international and national competitions 2005-2019.

Technical Skills

- Data Science: **Pytorch**, **Tensorflow Keras, Onnx, Triton, Scikit-learn, Pandas, Polars, Numpy**.
- Programming Languages:
  - Very confident with: **Python, Bash/Shell Scripting.**
  - Comfortable with: **C++, SQL, Matlab, Java**.

Projects

Personal Projects

For more projects or additional information check my GitHub page or my website's ***projects*** and ***blog*** sections.

- **Poker AI** – I developed 3 Poker agents, the best one using *Deep Reinforcement Learning* and achieving expert human level. I published one paper related to this project and one is waiting for publication - *poker.ptidor.com*
- **Quant-Trading AI** – a project that uses deep learning and technical analysis on stock trading. I developed expert-system agents trained to trade on **20** different stocks; **17** were successful with best return of **400%** over **6** years.
- **Portfolio Management with DRL** – my dissertation project with the scope of building a Deep Reinforcement Learning agent with a new reward function to optimize the profits and diversification on a portfolio of stocks.
- **Virtual Assistant for Students** – a *NLP* project similar to Siri/Google Assistant with extra special features targeted for an academic environment (for example - a course recommendation system based on text or audio input).

Publications *– 27 academic citations – all single author* *Semantic Scholar*

- **An analysis on very deep convolutional neural networks: problems and solutions**. Published in the international journal Studia UBB Informatica, Vol 66, No 1, July 2021, indexed in Mathematical Reviews. Single author. Link.
- **Deep reinforcement learning in quantitative algorithmic trading: a review** on Arxiv, 2021. Single author.
- **A view on deep reinforcement learning in imperfect information games**. Published in the international journal Studia UBB Informatica, Vol 65, No 2, October 2020, indexed in Mathematical Reviews. Single author. Link.
- **A math issue** published in the **Crux Mathematicorum** international journal; volume 44, no. 8**,** problem 4377 October 2018. Co-author. Link.
- **Subject 3** at the first Romanian Team Selection Test for **Junior Balkan Mathematical Olympiad** 2015. Link.
- **Deep Reinforcement Learning from Self-Play in no-limit Texas Hold'em Poker**. Published in the international journal Studia UBB Informatica, Vol 66, No 2, 2021, indexed in Mathematical Reviews. Single author. Link.

Extracurricular Work

- In May 2021, I was invited to hold two 2h lectures on Reinforcement Learning for **Babes-Bolyai University**.
- Over the years, I devised and proposed over 40 math problems for the **Romanian Mathematical Society**.
- In my free time, I work on a personal blog on diverse AI topics and interview preparation materials.
- Started a local Chess Club back in 2013 to help teenagers get better at chess.

Other Skills

English professional level: IELTS Certificate 7/9 (C1). **Hobbies**: astronomy, competitive chess, table tennis, gaming.